

AMENDMENTS TO THE CLAIMS:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently Amended) A folding machine provided downstream of a printing unit of a rotary printing machine, comprising:

a cut-off unit comprising:

a cut-off mechanism for cutting off a sheet at a predetermined cut-off length position from a web fed from said printing unit, and

a first belt conveyor comprising a pair of conveyor belts for nipping and conveying the cut sheet at a first speed;

a processor disposed downstream of said cut-off unit and configured to process the cut sheet conveyed at a second speed different than said first speed; and

a second belt conveyor disposed between said cut-off unit and said processor, the second belt conveyor comprising at least one pair of conveyor belts configured to receive the cut sheet conveyed by said first belt conveyor, and convey said sheet to said processor;

wherein said second belt conveyor is a variable speed conveyor configured to vary a sheet conveying speed during the conveyance of said sheet so that in receiving said sheet from said first belt conveyor, said sheet conveying speed becomes approximately equal to said first speed at which said sheet is conveyed in said first belt conveyor, and in conveying said sheet to said processor, said sheet conveying speed becomes approximately equal to said second speed at which said sheet is conveyed in said processor,

wherein said cut-off unit is constructed

to vary cut-off length of the web fed from said printing unit;

a speed at which said web is conveyed, the speed settable according to a cut-off length of said sheet that is cut off by said cut-off unit; and

said first speed, at which said sheet is conveyed in said first belt conveyor, is set so that it becomes equal to the web conveying speed.

2. (Canceled)

3. (Original) The folding machine as set forth in claim 1, wherein said cut-off unit comprises a first cut-off mechanism for partially cutting said web; and a second cut-off mechanism, provided downstream of said first cut-off mechanism, for cutting off said sheet from said web by cutting uncut portions of said web that is not cut by said first cut-off mechanism.

4. (Previously presented) The folding machine as set forth in claim 3, wherein said first belt conveyor nips said web that is cut by said second cut-off mechanism, and which further comprises another belt conveyor comprising a pair of conveyor belts for nipping and conveying said web to said first cut-off mechanism.

5. (Withdrawn) The folding machine as set forth in claim 3, further comprising a first relative-phase changer, interposed between said first cut-off mechanism and said second cut-off mechanism, for changing relative phases of rotation of said first cut-off mechanism and said second cut-off mechanism when varying a cut-off length of said web fed from said printing unit.

6. (Withdrawn) The folding machine as set forth in claim 3, further comprising: a scored-line forming mechanism, provided upstream of said first and second cut-off mechanisms, for forming a horizontally scored line in said web at a predetermined position; and a second relative-phase changer, interposed between said scored-line

forming mechanism and said first cut-off mechanism, for changing relative phases of rotation of said scored-line forming mechanism and said first cut-off mechanism when varying a cut-off length of said web fed from said printing unit.

7. (Withdrawn) The folding machine as set forth in claim 5, further comprising: a scored-line forming mechanism, provided upstream of said first and second cut-off mechanisms, for forming a horizontally scored line in said web at a predetermined position; and a second relative-phase changer, interposed between said scored-line forming mechanism and said first cut-off mechanism, for changing relative phases of rotation of said scored-line forming mechanism and said first cut-off mechanism when varying a cut-off length of said web fed from said printing unit.

8. (Original) The folding machine as set forth in claim 1, wherein said sheet conveying speed of said processor is faster than that of said first belt conveyor.

9. (Previously presented) The folding machine as set forth in claim 8, wherein the variable speed second belt conveyor is configured to receive the cut sheet at a speed approximately equal to the sheet conveying speed of said first belt conveyor, accelerate to a speed approximately equal to the sheet conveying speed of said processor, deliver the cut sheet to said processor at a speed approximately equal to the sheet conveying speed of said processor, decelerate to the sheet conveying speed of said first belt conveyor, and then receive a next cut sheet from said web.

10. (Original) The folding machine as set forth in claim 1, wherein said processor comprises a discharger for discharging a sheet cut off by said cut-off unit or a folder for folding a sheet cut off by said cut-off unit along a crease perpendicular to a sheet conveying direction.

11. (Canceled)

12. (Original) The folding machine as set forth in claim 1, wherein said first belt conveyor, said second belt conveyor, said cut-off unit, and said processor are respectively driven by different motors, and a phase of each of said motors can be relatively varied.

13. (Original) The folding machine as set forth in claim 1, further comprising an abutting portion, provided between said second belt conveyor and said processor, which a front end of said sheet abuts and by which a conveying phase of said sheet in said folder can be adjusted.

14. (Withdrawn) The folding machine as set forth in claim 1, further comprising a third belt conveyor, provided downstream of said second belt conveyor and at an entrance portion to said processor, which comprises a pair of conveyor belts for receiving said sheet from said second belt conveyor and conveying said sheet to said processor at the sheet conveying speed of said processor.

15. (Withdrawn) The folding machine as set forth in claim 1, further comprising a non-circular roller, provided at a position where said sheet is delivered from one of said two belt conveyors adjacent to each other to the other of said two belt conveyors, which guides one of a pair of conveyor belts and has a plurality of surface portions in which distances from a center of rotation to the surface portions are different.

16. (Withdrawn) The folding machine as set forth in claim 1, wherein the conveyor belts of said second belt conveyor are driven by non-circular rollers having a plurality of surface portions in which distances from a center of rotation to the surface portions are different.

17-19. (Canceled)